

## ABSTRACT

A full bridge circuit including four switching elements (Q1 to Q4) is alternated with a high switching frequency and a series-connected resonance circuit (5) including an inductor (L2) and a capacitor (C2) is made to resonate at a switching frequency of the full bridge circuit multiplied by an integer (for example, frequency multiplied by three), thereby generating a high voltage pulse for start up. After a high-pressure discharge lamp (DL) is started up, the full bridge circuit is alternated with a low switching frequency so as to operate as a step-down chopper for inverting the output polarity, thereby stably supplying rectangular wave voltage of low frequency to the high-pressure discharge lamp (DL) via a filter circuit including an inductor (L1) and a capacitor (C1).